

# Fleet Electrification Considerations

7.14.2020  
DOE EV Initiative:  
Forecasting



# The Oncor Situation:

Approximately 13% of all freight traffic passes through Texas. Primary corridors are I-35 and I-45 north – south and I-20 and I-30 east - west, which pass through Dallas and Fort Worth



# Fleet Data

Preliminary data indicates there are approximately 21,600 fleets<sup>1</sup> in the Oncor service area. These include fleets of two vehicles as well as fleets of hundreds of vehicles.

50% of freight by weight moves < 100 miles<sup>2</sup>

67% of freight by weight moves < 250 miles<sup>2</sup>

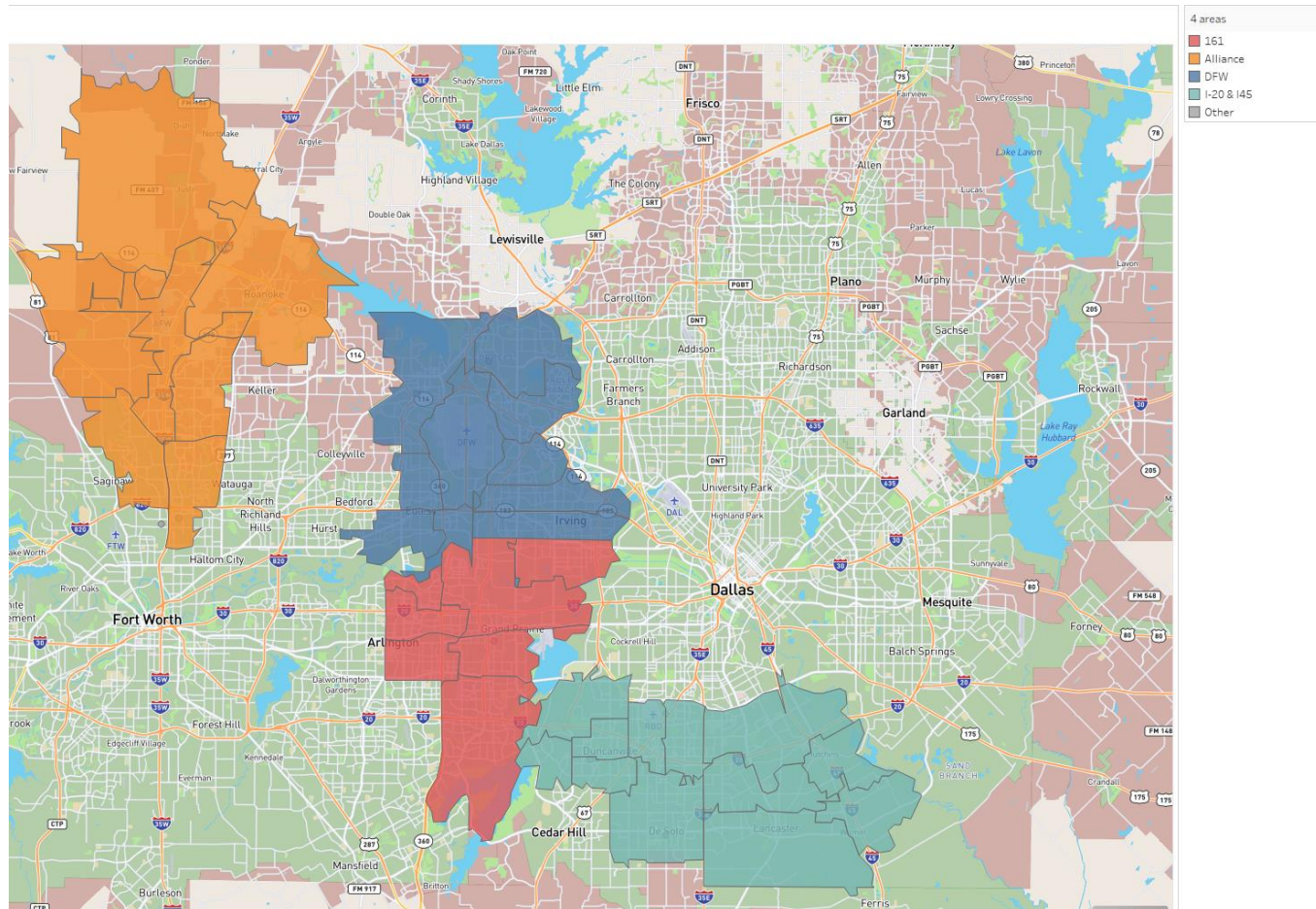


<sup>1</sup> Fleetseek 2018

<sup>2</sup> Bureau of Transportation Statistics 2018

# Logistics Clusters in DFW Area

D/FW has four pockets of high concentrations of logistics and distribution centers, all proximate to the interstates and/or DFW or Alliance airports.



# Co-location of Logistics and Distribution Centers

These pockets are very dense and could impact substations if multiple customers electrify only a few vehicles each simultaneously.

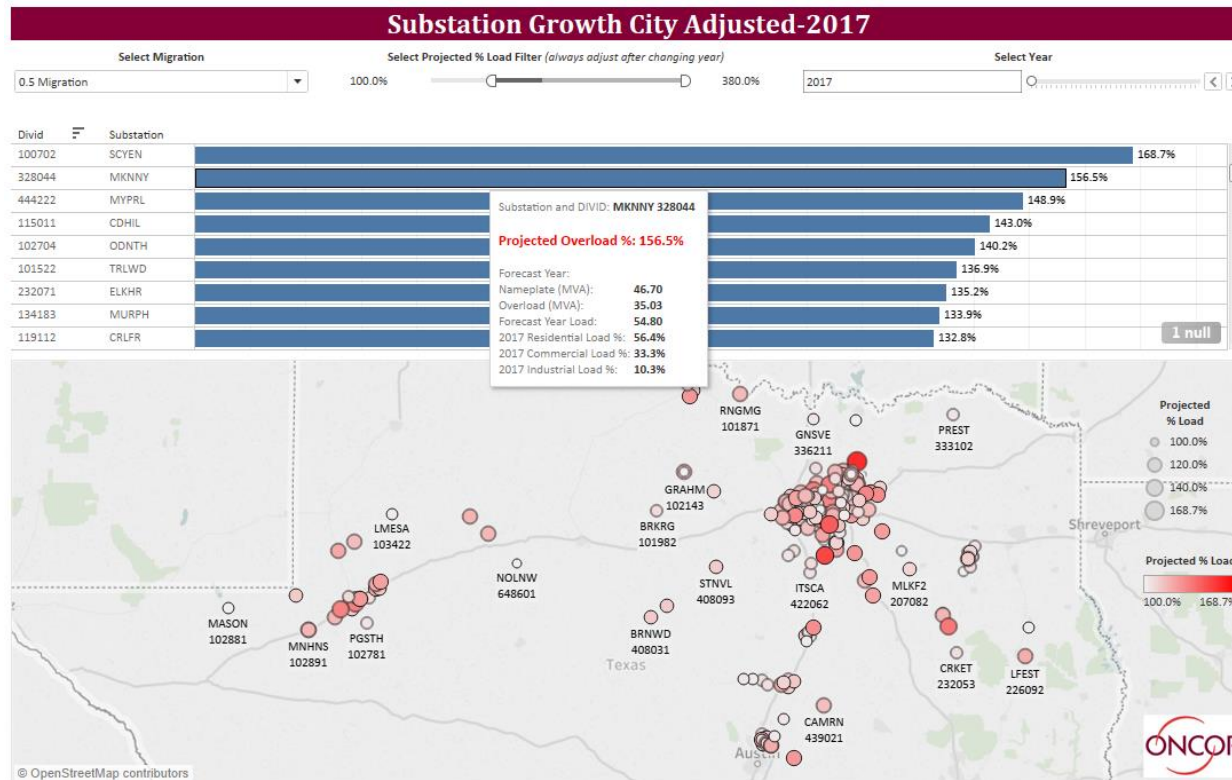


# The Tool

## Oncor built a strategic growth tool

- Each substation load is identified.
- Each zip code growth rates obtained from the Texas State Demographer and other sources
- Calculate load growth impacts through 2050.

## Added to this data sets to assess fleet electrification impacts



# Transition Issues for Consideration

- **Fleet operators require:**
  - Low cost
  - Very high reliability and resiliency
  - Flexibility to meet changing operational requirements
- **Utilities require:**
  - Accurate multi-year load forecasts and profiles
  - Information re: special equipment on site:
    - dual feed service
    - on site generation (solar, diesel, fuel cells, etc)
    - batteries
  - Time to prepare
- **COVID 19 has shown operational requirements can change dramatically and rapidly.**
- **Charging availability may require hospital-like redundancy.**
- **Optimization may mitigate against operational flexibility.**

# Takeaways:

- **Fleets/utilities engage now**
  - regardless of plans or equipment cost/availability
- **Fleets/utilities engage often**
  - changing needs, requirements and time tables
- **Open dialog with utility commissions re: your needs**
- **Utilities:**
  - assess your capacity through what if analysis.
  - identify land and approaches to serve the worst what if.
- **Fleet owners:**
  - determine best charging approach to meet operational requirements.
  - request capacity that provides for Black Swans rather than optimization as you will be paying, in most instances, for actual use which you can optimize on a daily basis.



## Questions?

Thank you for your interest.



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